35. CROTALARIA SESSILIFLORA LINN. SSP. HAZARENSIS ALI (FABACEAE) — A NEW DISTRIBUTIONAL RECORD FOR JAMMU AND KASHMIR (With a text-figure)



Fig. 1. Crotalaria sessiliflora Linn. ssp. hazarensis Ali. A. Habit, B. Flower, C. Pod with accrescent calyx.

While critically examining the herbarium specimens for a revisionary account of the genus *Crotalaria* Linn. some specimens collected by me from Jammu were found taxonomically interesting. On closer laboratory investigation and scrutiny of literature these were identified as *C. sessiliflora* Linn. ssp. *hazarensis* Ali. Besides the report of this taxon from Pakistan (ANANNOTATED CATALOGUE OF THE VASCULAR PLANTS OF WEST PAKISTAN AND KASH-MIR, Steward, R.R. 1972; FLORA OF WEST PAKISTAN, Nasir, E. and Ali, S.I. 1977) the subspecies is known only from a solitary report by M. Sharma (1980, *J. Econ. Tax. Bot. 1:* 170) who published it as a new record for India from Patiala district in Punjab.

C. sessiliflora Linn. ssp. hazarensis Ali grows usually concealed by grasses which render its detection rather a matter of chance. Probably for this reason, it was overlooked by B.M. Sharma and P. Kachroo (FLORA OF JAMMU AND PLANTS OF NEIGH-BOURHOOD, 1981) during their survey of the Jammu flora.

Since the taxon is common locally along the irrigation channels and other water courses, the present note records its extension as a new addition to the flora of Jammu and Kashmir. As it has not been described in any of our regional Floras, a brief illustrated description is furnished below for easy identification in the field and in the herbarium. The voucher specimens have been deposited in the herbarium of the Regional Research Laboratory, Jammu.

Crotalaria sessiliflora Linn. ssp. hazarensis Ali in Biologia, 12 : 27, 1966.

Erect, 15-50 cm tall, annual herb branching usually from the base; stems several, sparingly branched to almost simple, 1-1.5 mm thick, terete to more or less striate, thinly sericeo-pubescent. Leaves oblong to oblong-lanceolate, $1-4 \ge 0.3-0.7$ cm, acute or sub-obtuse, glabrous and punctate on the upper surface, sericeo-pubescent with brown or greyish brown hairs beneath; lateral nerves obscure; petioles silkily villous, 1-2 mm long; stipules setaceous, silkily brown villous, c. 1.5 mm long. Flowers bluish, 0.8-1.2 cm. long, 3-8 in terminal and axillary racemes or solitary in the upper axils, reflexed; bracts linear-lanceolate, 4-5x0.75 mm, glabrous on the ad-axial surface, silkily villous abaxially; bracteoles two, linear-lanceolate to subulate, c. 3x0.75 mm, glabrous adaxially, villous abaxially.

Calyx 0.8-1.2 cm long, 2-lipped, 5-lobed nearly to the base, glabrous within, pilose without; lobes acute, upper two broadly oblong-lanceolate, lower three narrow, linear-lanceolate. Corolla included, shorter than to just equalling the calyx. Pod inflated, obovate-oblong, sessile, 1-1.2 cm long, glabrous. Seeds 8-10, reniform, yellowish or brown, 1.75x1.75 mm.

Habitat: Hidden among grasses along the banks of irrigation channels and other water courses in low lying areas; common.

Flowers: September-October. Fruits: October-November.

Distribution: Pakistan. INDIA: Punjab, Jammu.

Specimeus examined: Phulain village (c. 300 m) B.M. Sharma 50232; Sumh village (c. 300 m) B.M. sharma 50233; Suren Chak (-) B.M. Sharma 51490; Danga village (-) B.M. Sharma 51491.

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36. FORMATION OF ABNORMAL FRUIT IN CARICA PAPAYA

Carica papaya (Hindi name Papita) is a common fruiting plant grown throughout the country for its nutritious fruits. Fruits are thick in the middle and tapering towards the poles. The fruit is a berry which develops from multicarpillary, syncarpous ovary. A plant growing in our house bears several normal and one abnormal fruit. It is trifurcated like a palm with three fingers. Three fingers are united at the base up to 1.25 cm. The abnormality is due to apocaroy (carpels becoming independent instead of fused) and the fruit is an excellent example of an aggregate fruit. Neither condition has been reported so far in this plant. The fruit is of normal size but remains seedless.

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